

# Evolved health psychology

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# VALORIZATION

Science is – for a large part – about moving beyond observable facts. To achieve an understanding of phenomena, a common method for scientists is to let go of what is apparent and to find underlying mechanisms or ‘hidden essences’ – as such, it involves ‘carving nature at its joints’ (cf. Phaedrus, Plato). Physicists attempt to explain the behavior of middle-sized objects by delving deeper and deeper into the structure of atoms (e.g. strings). Biologists try to understand disease by carving a way into the structure of cells, up until the DNA. And similarly, psychologists try to explain behavior by unravelling the structure and architecture of the human mind – its biological basis (e.g. neurons) or its cognitive design underlying psychological determinants of behavior (e.g. people’s desires, beliefs and attitudes). Thus, often, these kinds of reductionist efforts to understanding the non-obvious, hidden, mechanisms that could illuminate why things happen, inherently involves a move towards a theoretical realm. This makes much of science by definition an anti-practical undertaking. The realm of scientific explanation is often very much detached from the things society cares about. For example, how does understanding how attitudes are formed help us address a societal problem? Why is an understanding of particular psychological mechanisms relevant to society? This is the question of valorization, and answering it requires us to inflate research results from the realm of abstract theoretical terms to the level of observable effects.

Describing the relevance and societal importance of scientific findings is fraught with difficulty. For one, *a priori*, relevance as it is apparent now can be very much detached from the description of relevance given to it *a posteriori* – time must tell. Historically, this is illustrated by the discovery of DNA (Watson & Crick, 1953) – the ultimate valorization of this discovery lies in discoveries decades later (including understanding and screening for genetic disease) and more valorization is probably yet to come. And second, it is often a subjective matter whether an invention is relevant or of value. But for this dissertation, valorization was embedded in the goal of the project, so I will attempt to lay-out some key points. I will focus on the relevance of the project – as I see it.

In this dissertation, we have tried to examine how evolutionary psychology can help understand health behavior. This project was abstract in the sense that integration of two scientific disciplines – evolutionary psychology and health psychology – was the broader project goal. A more distal goal, however, is that this integration is attempted to expand the theoretical foundations of health psychology, which in turn should lead to an increased understanding of health behavior. We did so by focusing on one health behavior in particular- peoples’ attitudes towards and intention to test for sexually-transmitted infections (STI). Infectious disease pose challenges to health and well-being. Despite the many efforts to promote safe sexual practices (see Scott-Sheldon et al., 2011), STI are prevalent and a source of health problems (World Health Organization, 2016). Available

treatments for STI (either curative or palliative) can have no effect when people remain undiagnosed – therefore, actively seeking health care services and getting screened are critical steps needed to be taken by individuals. The relevance of trying to understand how people’s inclination to test for STI arises is clear: testing for STI is a societal relevant and beneficial behavior as it has the potential to decrease the disease burden caused by these infections. The societal burden caused by disease is twofold. First, disease caused by STI can decrease people’s quality of life which is a cost to society as a whole. Second, decreasing disease prevalence also decreases an economic burden on society.

If we know the relevant processes, variables and triggers of health-protective behaviors, this knowledge can be applied to benefit health promotion campaigns. As part of our evolutionary approach, we have looked at processes that we believe are part of human’s “instinctive”, evolved health psychology – as opposed to things that we learn to stay away from. An important component of our evolved health psychology, we proposed, may include pathogen-disgust- and we found some evidence that this emotion relates to differences in health behavior. This knowledge is potentially relevant in that it could mean that for example health promotion campaigns, aiming to increase testing behavior, could leverage this specific emotion to promote testing. Additionally, it may find application outside the domain of STD in promoting various other health behaviors. There is no good reason that the aspects of our evolved health psychology we examined (i.e. pathogen-avoidance) do not have the potential to improve societal health behavior in other domains – example in designing effective persuasive communication methods to warn people about the risk of particular behavior (e.g. smoking, drinking, etc.). Indeed, results reported in **Chapter 3** of this dissertation indicate that pathogen-avoidance motivation (e.g. pathogen disgust) is likely related to a broad array of health-protective behaviors. A question that needs to be further examined, though, is how health promotion programs can best utilize this motivational system in order to promote healthy behavior. Some findings reported in this dissertation, hopefully, provide a foundation for future research which may translate to health psychologists’ ability to promote health behavior, and perhaps eventually to decrease the societal burden causes by disease.

